

10/518,822

1-5. (CANCELED)

6. (CURRENTLY AMENDED) A catheter to be inserted from outside of a body into a coelom and reaching a distal end thereof to a target region while a proximate end thereof remaining outside of the body, the catheter comprising:

an outer tube being sufficiently small in size so as ~~sized~~ to be inserted into a blood vessel; ✓

a first inner tube located within the outer tube and containing a forceps mechanism and an operating linkage constrained within the first inner tube in a closed position;

a second inner tube also located within the outer tube containing an injection mechanism;

the forceps mechanism having a first handling portion at the proximate end and a grasping portion at the distal end, the grasping portion being configured to open and close in conjunction with manipulation at the first handling portion, and being capable of holding the target region accessed by the catheter while at least a leading end of the distal end of the outer tube remains inserted within the blood vessel; ✓

the injection mechanism having a second handling portion at the proximate end, and an injection needle at the distal end, the injection needle being configured to be moved forward ~~[[up]]~~ to a position to ~~be protruded so as to protrude~~ from the distal end, ✓
and to be moved back ~~[[up]]~~ into a retracted position ~~[[to be]]~~ stored inside of the distal end, ✓
and the injection mechanism being capable of puncturing the target region with the injection needle and injecting injectant into the target region. ✓

7. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 6 wherein the forceps mechanism is configured to bias the grasping portion toward a direction to close the grasping portion with force of a spring.

8. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 6 wherein the forceps mechanism comprises a lock device that prevents the grasping portion opening and closing.

4/27/09 11:27 AM

- 2 -

10/518,822

9. (CURRENTLY AMENDED) The catheter as set forth in any of claims 6 to 8 wherein the injection mechanism is configured to bias the injection needle toward a direction to move back the injection needle with force of a spring. ✓

10. (CURRENTLY AMENDED) The catheter as set forth in any of claims 6 to 9 wherein the injection mechanism comprises a lock device that forbids the injection needle moving back. ✓

11. (CURRENTLY AMENDED) A catheter for insertion into a blood vessel comprising:

an outer tube being sufficiently small in size so as sized to be inserted into the blood vessel; ✓

a first inner tube, located within the outer tube and containing a forceps mechanism having a first handling portion at a proximate end and a grasping portion at a distal end, the grasping portion being operated by a linkage configured to move the forceps mechanism between a closed state and an open state corresponding to an operators manipulation of the handling portion and being capable of holding the target region accessed by the catheter while at least a leading end of the distal end of the outer tube remains inserted within the blood vessel; ✓

a second inner tube, located within the outer tube and containing an injection mechanism having a second handling portion at the proximate end, and an injection needle at the distal end, the injection needle being configured to extend to a position to protrude from the distal end, and to retract to a position to be stored inside of the distal end, and the injection mechanism being capable of puncturing the target region with the injection needle and injecting injectant into the target region; and ✓

wherein in the closed state the linkage for operating the grasping portion of the forceps mechanism is withdrawn inside the first inner tube and constrained by the first inner tube to maintain the forceps mechanism in the closed state.

12. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 11, further comprising a spring having a spring force wherein the spring force maintains the forceps mechanism in the closed state and also the linkage within the first inner tube in the closed state.

4/27/09 11:22 AM

- 3 -

10/518,822

13. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 12, wherein the spring force is overcome by an operator influencing the first handling portion and the spring is compressed to move the grasping portion to the open state.

14. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 13 wherein in the open state of the grasping portion the linkage is axially displaced outside of the first inner tube to facilitate a complete lateral expansion of the linkage and a fully open position of the grasping portion.

15. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 13, wherein the forceps mechanism comprises a locking device that is actuatable to maintain the compressed spring in one of the open state, the closed state and an intermediate state between the open and closed state which maintains the grasping portion in a desired orientation.

16. (CURRENTLY AMENDED) The catheter as set forth in claim 11 further comprising a deflectable spring which maintains ~~[[a]] the~~ needle of the injection mechanism in a retracted state within the second inner tube. ✓

17. (PREVIOUSLY PRESENTED) The catheter as set forth in claim 16, wherein the injection mechanism further comprises a piston and a cylinder for overcoming a bias of the deflectable spring that is configured to retract the needle, and a locking device that is actuatable to maintain the needle in a desired position.

18. (CURRENTLY AMENDED) The catheter as set forth in claim 11, wherein ~~the linking mechanism~~ linkage comprises a four-bar mechanism dependently rotatable about four separate pivot points to provide both axial extension of the forceps relative to the first inner tube and the outer tube as well as movement between the open and closed state of the grasping portion. ✓

4/27/09 11:27 AM

- 4 -